This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A method for reproducing coniferous somatic embryos ~~conifers~~ by somatic embryogenesis comprising ~~using a sugar with galactose comprising at least one of the sub-units selected from the group consisting of monosaccharides, disaccharides, oligosaccharides, and polysaccharides as a carbon source in an embryogenic culture nutrient medium selected from the group consisting of induction medium, proliferation medium, and prematuration medium and supplementing the nutrient medium with additional sugars.~~ growing an embryogenic culture derived from an explant on a nutrient medium selected from the group consisting of induction medium, maintenance medium and prematuration medium, wherein the nutrient medium comprises a galactose-containing sugar and an additional sugar, and wherein the induction medium is used to induce an explant to form an embryogenic tissue, the maintenance medium is used to grow and maintain the embryogenic culture and the prematuration medium is used to prepare the embryogenic culture for maturation to obtain cotyledonary stage embryos suitable for germination.

2. (Cancelled)

3. (Cancelled)

4. (Previously presented) The method of claim 1, wherein the galactose-containing sugar is lactose.

5. (Previously presented) The method of claim 1, wherein the galactose-containing sugar is less than about 6% of the nutrient medium.

6. (Previously presented) The method of claim 1, wherein the nutrient medium is gelled or liquid.

7. (Currently amended) The method of claim 1, wherein the ~~conifers~~ coniferous somatic embryos are selected from the family *Pinaceae*.

8. (Currently amended) The method of claim 7, wherein the ~~conifers~~ coniferous somatic embryos are selected from the genera *Pinus, Picea* and *Pseudotsuga*.

9. (Currently amended) The method of claim 8, wherein the ~~conifer~~ coniferous somatic embryo is *Pinus taeda* or a hybrid thereof.

10. (Currently amended) The method of claim 8, wherein the ~~conifer~~ coniferous somatic embryo is *Pseudotsuga menziesii*.

11. (Currently amended) The method of claim 8, wherein the ~~conifer~~ coniferous somatic embryo is *Pinus radiata*.

12. (Previously presented) The method of claim 1 in which the embryogenic culture is cultured in at least one prematuration medium comprising a galactose-containing sugar and then transferred to a maturation medium to produce cotyledonary stage embryos suitable for germination.

13. (Currently amended) The method of claim 12, wherein the prematuration medium contains less auxin and less cytokinin than the ~~nutrient~~ maintenance medium ~~used during proliferation~~.

14. (Previously presented) The method of claim 12, wherein the prematuration medium further comprises abscisic acid.

15. (Cancelled).

16. (Previously presented) The method of claim 1, wherein the additional sugars are readily metabolized.

17. (Original) The method of claim 16, wherein the additional sugars are selected from the group consisting of sucrose, glucose, and fructose.

18. (Previously presented) The method of claim 1, wherein the galactose-containing sugar is more than about 1% of the nutrient medium.

19. (Previously presented) The method of claim 1, wherein the embryogenic culture contains early stage embryos.

20. (Previously presented) The method of claim 1, wherein the galactose-containing sugar is less than about 2% of the nutrient medium.

21. (Previously presented) The method of claim 1, wherein the galactose-containing sugar is between about 1% and about 6% of the nutrient medium.

22. (Previously presented) The method of claim 1, wherein the nutrient medium further comprises an auxin and a cytokinin.

23. (Currently amended) A method for reproducing ~~reproduction by somatic embryogenesis of conifers selected from the group consisting of~~ *Pinus taeda* ~~and hybrids,~~ *Pinus radiata*, and *Pseudotsuga menziesii* somatic embryos by somatic embryogenesis which comprises: ~~using a sugar with galactose comprising at least one of the sub-units selected from the group consisting of monosaccharides, disaccharides, oligosaccharides, and polysaccharides in an embryogenic culture nutrient medium selected from the group consisting of induction medium, proliferation medium, and prematuration medium and supplementing the nutrient medium with additional sugars.~~ growing an embryogenic culture derived from an explant on a nutrient medium selected from the group consisting of induction medium, maintenance medium and prematuration

medium, wherein the nutrient medium comprises a galactose-containing sugar and an additional sugar, and wherein the induction medium is used to induce an explant to form an embryogenic tissue, the maintenance medium is used to grow and maintain the embryogenic culture and the prematuration medium is used to prepare the embryogenic culture for maturation to obtain cotyledonary stage embryos suitable for germination.

24. (Cancelled).

25. (Cancelled).

26. (Previously presented) The method of claim 23, wherein the galactose-containing sugar is lactose.

27. (Previously presented) The method of claim 23, wherein the galactose-containing compound is less than about 6% of the nutrient medium.

28. (Previously presented) The method of claim 23, wherein the nutrient medium is gelled or liquid.

29. (Currently amended) The method of claim 23, wherein the ~~conifer~~ somatic embryo is *Pinus taeda* or a hybrid thereof.

30. (Currently amended) The method of claim 23, wherein the ~~conifer~~ somatic embryo is *Pseudotsuga menziesii*.

31. (Currently amended) The method of claim 23, wherein the ~~conifer~~ somatic embryo is *Pinus radiata*.

32. (Previously presented) The method of claim 23 in which the embryogenic culture is cultured in at least one prematuration medium comprising a galactose-containing sugar and then transferred to a maturation medium to produce cotyledonary stage embryos suitable for germination.

33. (Currently amended) The method of claim 32, wherein the prematuration medium contains less auxin and less cytokinin than the ~~nutrient~~ maintenance medium ~~used during proliferation~~.

34. (Previously presented) The method of claim 32, wherein the prematuration medium further comprises abscisic acid.

35. (Cancelled).

36. (Previously presented) The method of claim 23, wherein the additional sugars are readily metabolized.

37. (Original) The method of claim 36, wherein the additional sugars are selected from the group consisting of sucrose, glucose, and fructose.

38. (Previously presented) The method of claim 23, wherein the galactose-containing sugar is more than about 1% of the nutrient medium.

39. (Currently amended) The method of claim 23, wherein the embryogenic culture contains early stage embryos and the early stage embryos are being cultured in the selected ~~culture~~ nutrient medium.

40. (Previously presented) The method of claim 23, wherein the nutrient medium further comprises an auxin and a cytokinin.

41. (Previously presented) The method of claim 23, wherein the galactose-containing sugar is less than about 2% of the nutrient medium.

42. (Previously presented) The method of claim 23, wherein the galactose-containing sugar is between about 1% and about 6% of the nutrient medium.

43. (Currently amended) A method for reproducing conifers by somatic embryogenesis which comprises: growing conifer cells on a nutrient medium comprising a galactose-containing

sugar, additional sugars, an auxin, and a cytokinin to produce an embryogenic culture and transferring the embryogenic culture to maturation medium to obtain cotyledonary stage embryos suitable for germination and reproduction of conifers.

44. (Previously presented) The method of claim 1, wherein the galactose-containing sugar is galactose.

45. (Previously presented) The method of claim 23, wherein the galactose-containing sugar is galactose.

46. (New) A method for reproducing coniferous somatic embryos by somatic embryogenesis comprising:

placing an explant on an induction medium and growing an embryonic culture containing early stage embryos;

transferring the embryonic culture to maintenance medium to maintain the embryonic culture;

transferring the embryonic culture to prematuration medium;

transferring the embryonic culture to maturation medium to obtain cotyledonary stage embryos suitable for germination, wherein at least one of the induction, maintenance and prematuration media comprise a galactose-containing sugar.

47. (New) A method for reproducing *Pinus taeda*, *Pinus radiata*, and *Pseudotsuga menziesii* somatic embryos by somatic embryogenesis which comprises:

placing an explant on an induction medium and growing an embryonic culture containing early stage embryos;

transferring the embryonic culture to maintenance medium to maintain the embryonic culture;

transferring the embryonic culture to prematuration medium;

transferring the embryonic culture to maturation medium to obtain cotyledonary stage embryos suitable for germination, wherein at least one of the induction, maintenance and prematuration media comprise a galactose-containing sugar.

48. (New) A method for reproducing coniferous somatic embryos by somatic embryogenesis comprising growing an embryogenic culture derived from an explant on a nutrient medium selected from the group consisting of induction medium, maintenance medium and prematuration medium, wherein the nutrient medium comprises at least about 1% galactose-containing sugar, and wherein the induction medium is used to induce an explant to form an embryogenic tissue, the maintenance medium is used to grow and maintain the embryogenic culture and the prematuration medium is used to prepare the embryogenic culture for maturation to obtain cotyledonary stage embryos suitable for germination.

49. (New) A method for reproducing coniferous somatic embryos by somatic embryogenesis comprising growing an embryogenic culture derived from an explant on a nutrient medium

selected from the group consisting of maintenance medium and prematuration medium, wherein the maintenance medium is used to grow and maintain the embryogenic culture and the prematuration medium is used to prepare the embryogenic culture for maturation to obtain cotyledonary stage embryos suitable for germination.